



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,006	10/18/2000	James R. Leger	110.01420101	4510

26813 7590 07/08/2002

MUETING, RAASCH & GEBHARDT, P.A.  
P.O. BOX 581415  
MINNEAPOLIS, MN 55458

EXAMINER

PHAM, HOA Q

ART UNIT PAPER NUMBER

2877

DATE MAILED: 07/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

KIL

<b>Office Action Summary</b>	Application No. 09/691,006	Applicant(s) LEGER ET AL.	
	Examiner Hoa Q. Pham	Art Unit 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 7, 9, 13, 14, 18-20 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Willenborg et al (5,159,412).

Claims 1, 9, 13, 14, and 24 are read on the teachings of Willenborg et al, Willenborg et al discloses a measuring device comprises an objective lens (62), an illumination source (52), a spatial filter (70), and an analyzer portion (188) operable to generate polarization information base on the reflected light (see figures 2 and 3).

Regarding claims 7, 18-20, figure 2 teaches a rotating polarizer (76) and analyzer (78).

Regarding claim 14, see figure 2 for collimating beam (54).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2877

4. Claims 2-6, 8, 10-12, 15-17, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willenborg et al in view of Ghislain et al (5,939,709).

Regarding claims 2 and 8, Willenborg et al does not explicitly teach the use of optical fiber and a CCD detector; however, such the features are known in the art as taught by Ghislain et al. Ghislain et al teaches the use of optical fiber for transmitting and receiving light and the detector is a CCD (see column 12 lines 44-45 and column 5 lines 26-27). Those of ordinary skill in the art at the time the invention was made to include in Willenborg et al an optical fiber for transmitting light from the light source for the purpose of preventing loss light within the measuring device, also using CCD detector would improve the image signal of the surface.

Regarding claims 3 and 15, Willenborg teaches the use of objective lens having high numerical aperture (column 1 lines 26-27). Thus, it would have been obvious to use NA in the range of 0.5 to 1.

Regarding claims 4-6, 10-11, 16-17, and 21-22, Ghislain et al teaches that the spatial filter (32a) can be located next to the objective lens (30) (see figure 3B). Those of ordinary skill in the art at the time the invention was made to locate the spatial filter of Willenborg et al next to the objective lens as taught by Ghislain et al because no matter where it is located it still function in the same manner.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kain et al (6,008,892 and 6,177,990) discloses a fluorescence imaging system.

Art Unit: 2877

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Q. Pham whose telephone number is (703) 308-4808. The examiner can normally be reached on 6:30 AM to 5 PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (703) 308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Hoa Q. Pham  
Primary Examiner  
Art Unit 2877

HP  
July 1, 2002.